

## Drill Calibration

There are two methods to calibrate a drill. One method is to weigh the seed delivered on an area by the drill at various settings and to adjust until the desired rate of pounds per acre is obtained. You must adjust the Pure Live Seed (PLS) requirements of pounds of seed per acre in using this method. The second method is to convert from pounds of seed per acre to number of seeds per row foot. This second method is easier and usually accurate enough. It is this second method that will be discussed here.

Run the drill over hard ground or on a tarp and count the seeds dropped per foot of row. The table below will furnish calibration data for most species and situations.

### Seed per for each pound of Pure Live Seed for various row spacings and species.

<b>Species</b>	<b>Approx. No. Seed per lb. of pure seed</b>	<b>6" Spacing 87,120 row feet/acre</b>	<b>12" Spacing 43,560 row feet/acre</b>	<b>36" Spacing 14,520 row feet/acre</b>	<b>40" Spacing 13,070 row feet/acre</b>
Kentucky Bluegrass	1,700,000	19.5	39.0	117.1	130.1
Big Bluegrass	917,000	10.5	21.1	63.2	70.2
Smooth Brome	125,000	1.4	2.9	8.6	9.6
Tall Fescue	230,000	2.6	5.3	15.8	17.6
Creeping Meadow Foxtail	750,000	8.6	17.2	51.7	57.4
Meadow Foxtail	900,000	10.3	20.7	62.0	68.9
Green Needlegrass	140,000	1.6	3.2	9.6	10.7
Orchardgrass	488,000	5.6	11.2	33.6	37.3
Reed Canarygrass	506,000	5.8	11.6	34.8	38.7
Timothy	1,230,000	14.1	28.2	84.7	94.1
Beardless Wheatgrass	135,000	1.5	3.1	9.3	10.3
Bluebunch Wheatgrass	140,000	1.6	3.2	9.6	10.7
Crested Wheatgrass	175,000	2.0	4.0	12.1	13.4
Intermediate Wheatgrass	100,000	1.1	2.3	6.9	7.7
Pubescent Wheatgrass	91,000	1.0	2.3	6.3	7.0
Slender Wheatgrass	160,000	1.8	3.7	11.0	12.2
Siberian Wheatgrass	170,000	2.0	3.9	11.7	13.0
Streambank Wheatgrass	170,000	2.0	3.9	11.7	13.0
Tall Wheatgrass	79,000	0.9	1.8	5.4	6.0
Western Wheatgrass	110,000	1.3	2.5	7.6	8.4
Beardless Wildrye	175,000	2.0	4.0	12.1	13.4
Russian Wildrye	170,000	2.0	3.9	11.7	13.0
Alkali Sacaton	1,750,000	20.1	40.2	120.5	133.9
Basin Wildrye	145,000	1.7	3.3	10.0	11.1
Blue Grama	825,000	9.5	18.9	56.8	63.1
Idaho Fescue	500,000	5.7	11.5	34.4	38.3
Indian Ricegrass	150,000	1.7	3.4	10.3	11.5
Mountain Brome	90,000	1.0	2.1	6.2	6.9
Needle-and-thread	115,000	1.3	2.6	7.9	8.8
Prairie Sandreed	270,000	3.1	6.2	18.6	20.7
Rough Fescue	200,000	2.3	4.6	13.8	15.3
Sand Bluestem	125,000	1.4	2.9	8.6	9.6
Thickspike Wheatgrass	156,000	1.8	3.6	10.7	11.9

**Viable Seed per Row Foot =  $\frac{\text{Seeds/lb. pure seed} \times \text{PLS planting rate}}{\text{Row feet per acre, at width to be planted}}$**

**Planting Rate lbs. PLS =  $\frac{\text{Viable seed/row foot} \times \text{row foot per acre}}{\text{Seeds unit per pound of pure seed}}$**

**Grain Drill Calibration**

**# seed planted =  $\frac{43,560 \times \# \text{ seed collected}}{\text{drill width} \times \text{strip length}}$**

**strip length in feet =  $1.1 \times \# \text{ revolutions} \times \text{wheel circumference (ft.)}$**